Railway Gazette INTERNATIONAL

INDEX 1987

(VOLUME 143)

Editor Richard Hope CEng MIEE MIMechE

Reed Business Publishing Limited
Quadrant House
Sutton
Surrey SM2 5AS
Great Britain

For the convenience of those who do not bind back copies the table below shows the numbers of pages contained in each issue.

January	1-64	July	421-480
February	65-120	August	481-556
March	121-192	September	557-628
April	193-256	October	629-700
May	257-344	November	701-768
June	345-420	December	769-844

Most entries in this index are classified first by country and then under the railway or metro authority concerned. Entries affecting more than one country are listed under 'International', which precedes the alphabetical listing of the countries. Separate sections at the end of the index cover letters to the editor, maps, product news, publications reviewed and personal announcements.

*Indicates principal articles

INTERNATIONAL

African Railways Staff College. 132
African Union of Railways 4th Symposium. 687*
Brakes, in search of the ideal. 15
Cab signalling compatibility discussed. 773
Comecon long-life rail steel test. 204
Europe. Current inverter traction evolution. 600*
Europe. Intercontainer wagon order. 641
Euro-Spluga consortium formed. 351
Europe. Brenner base tunnel agreement. 71, 561
Europe. Constanza-Samsun train ferry. 127
Europe. Faster freight across frontiers. 100*
Europe. Intercontainer train network plan. 712
Europe. Interfrigo agreement with Albania. 268
Europe. International Container Bureau swap-body standards. 138
Europe. International rail traffic decline. 485
Europe. Öresund link report. 563(map)
Europe. Rheingold TEE train eliminated. 199
Europe. Paris-Amsterdam-Cologne-London high speed line approval. 775(map)
Europe. Three phase traction motor control evolution. 600*
European high speed railway plans. 82, 644, 783*
European freight will be time-sensitive. 93*
Eurotunnel, financial prospects. 369*, 487, 570, 777
Eurotunnel plans and progress. 5, 69, 125, 127, 204, 208, 210, 263, 349, 365, 369*, 373*(map), 379*, 383*, 425, 637, 705, 777
Eurotunnel, technical considerations. 373*(map), 435, 713
Eurotunnel, traffic working plans. 379*(map), 644, 715
Eurotunnel and Transmanche tests in Simplon tunnel. 435
High speed passenger trains, world review. 607*, 784
Intercontainer routes. 356
International Union of Public Transport, 47th Congress and exhibition. 304*
Light rail vehicle evolution, modern. 596*
New railways being built, world survey. 29*
Nordo Line train ferry routes, Baltic. 7
Panamerican Railway Congress Association, 1987 meeting. 735*
Railway organisation in the Third World. 773
Signalling revolution, lineside signal twilight. 5
Termini, urban unused problem. 561
Tramcar evolution, modern. 596*
UITP Congress, Lausanne 1987. 425

GEOGRAPHICAL

A

ALBANIA
RPSSH Interfrigo agreement. 268
RPSSH international traffic. 712

ALGERIA
Algiers LRT proposal. 641
Infrafer to build new railways. 263
SNTF Algiers terminal. 641
SNTF Ramadane Djamal-Jijel branch building. 775
SNTF road-rail shunter tender. 568
SNTF track renovation tender. 568

ANGOLA
Benguela Railway loco second hand. 493
Benguela Railway rehabilitation. 274

ARGENTINA
Buenos Aires LRT route. 75, 355
FA Buenos Aires suburban terminal La Lucila opens. 712
FA Deán Funes-Santa Fe rail service restored. 492
FA Ezeiza airport branch proposed. 356
FA grain hopper wagon purchase. 568
FA Morón Sarmiento passenger terminal renewed. 640
FA re-engining diesels. 493
FA locotractor order. 780
FA partial privatisation plans. 125
FA Posadas-Encarnación bridge tracklaying. 775
FA Presidente Illa interchange with Subte. 781
FA Remedios de Escalada workshop for EMUs. 356
FA Roca railway electrification extension. 267
FA Roca railway EMU depot. 568
FA Villa Soldati interchange with Subte. 433
FA wagon orders. 263
Ferrocarriles del Sur starts up. 775
Forestal del Norte, SA. 125
Subte expansion plans. 752*(map)
Subte Line A EMU refurbishment. 639
Subte Line D extension. 357, 492, 639, 752(map)
Subte Line E2 extension opening. 639
Subte interchanges FA. 433. 781

AUSTRALIA
ACET Perth track machine technology agreement. 713
Adelaide O-Bahn prospects. 274,436
Alice Springs-Darwin line private consortium. 7
ANR Class DL loco order. 13
ANR financial position. 515*
ANR investment plans and finance. 707
ANR loco second-hand for Tasmania. 13
ANR tachometer recorder order. 568
Australian railway deficits. 515*(map)
Caterpillar engines in Australian diesels. 498
Hamersley Iron current inverter loco proposal. 498
MMTA conversions to LRT. 641
MMTA Tullamarine airport link planned. 132
Mount Newman loco order. 780
Mount Newman loco rebuilding. 268, 498, 531
Perisher Skitube Railway. 80, 356, 640
QR air-conditioning plant (rolling stock) order. 568
QR Brisbane local electrification expands. 525
QR Brisbane suburban network extension opens. 780
QR Brisbane terminals capacity increase. 76
QR Caboolture-Gladstone electrification. 523*(map)
QR EMU order. 780
QR financial position. 515*
QR Tolomies-Emerald electrification open. 780
QR tracklaying machine experience. 35*. 136
Railways of Australia, passenger group. 519*
Robe River loco rebuilding. 531
SRANSW automatic train control tests. 204
SRANSW DMU re-engineering tender called. 356
SRANSW East Hills-Glenfield electrification. 529*(map)
SRANSW EMU, chopper double deck, order. 7, 205
SRANSW financial position. 515*
SRANSW HPT order. 263
SRANSW Maldon-Dombarton 25 kV electrification. 201, 529*(map)
SRANSW Port Kembla re-signalling tender. 133
SRANSW radio telecommunications for maintenance. 713
SRANSW Riverstone-Richmond electrification. 199
SRANSW Superfreighter network. 516*
SRANSW Tangara EMUs. 524*
SRANSW Tangara maintenance depot tender. 205
SRANSW track laying crane orders. 568
STASA DMU order. 268
Sydney-Canberra-Melbourne high speed line. 531*, 574, 777
Sydney Darling Harbour monorail. 357, 780
Sydney LRT proposals (monorail). 210, 357
Westrail 'Australind' train service start. 780
Westrail diesel loco purchase. 77
Westrail DMU order for Perth-Bunbury. 357, 521*
Westrail EMU order. 640
Westrail financial position. 515*
Westrail loco tender. 133
Westrail merger with ANR possibility. 786
Westrail Narngulu marshalling yard. 132
Westrail Perth electrification tenders. 351, 521*(map), 780
Very Fast Train joint venture. 531*, 574, 777
V/Line financial position. 515*
V/Line West Melbourne carriage depot. 780

AUSTRIA
ÖBB ballast bags under track tests. 45*
ÖBB Classs 1044.501 modified for high speed. 637
ÖBB Class 1146 loco. 569
ÖBB Class 5047 DMU. 637
ÖBB Design 2000 high speed coach. 265
ÖBB 'Die Neue Bahn' plan. 427, 561
ÖBB Hohenems passenger terminal modernised. 712
ÖBB Hütteldorf-Heiligenstadt Wien line re-opens for passengers. 431
ÖBB Mariazellerbahn transporter wagons delivered. 712
ÖBB Murtal section train in dog race. 80
ÖBB Villach marshalling yard reconstruction, 568, 640
Wiener U-Bahn EMU prototypes (Line U3). 181*

B

BANGLADESH
BR central workshop construction tender. 205
BR coach deliveries. 13
BR rail order. 77

BELGIUM
Locorem SA distributes Railtec SA road/rail vehicles. 493
SNCB Athus-Mont St Martin 25 kV electrification. 356
SNCB Charleroi link line. 269
SNCB Class I10 coach delivery. 269
SNCB Class M2 push-and-pull trailers. 76
SNCB Coach delivery. 133
SNCB current inverter EMU order. 73
SNCB reorganisation. 316*
SNCB/SNCF/BR TGV sets tendering. 433
SNCB TGV Nord extensions in Belgium. 707, 783*

BOLIVIA
Enfe Santa Cruz-Puerto Quijarro branch proposed. 204
Enfe track tender and World Bank loan. 432
Enfe World Bank reconstruction loan. 204
Enfe World Bank loan for improvements. 268
Private owner LPG tank wagons. 133

BOTSWANA
BR Gaborone-Mafikeng line upgrading. 268, 780
BR radio electronic token block installation. 563, 679*
BR rehabilitation contract. 432
BR rolling stock second-hand. 646
BR takeover of routes postponed. 71, 138, 360, 633

BRAZIL
Acominas federal steel plant, rail rolling mills equipment. 13
Avibras enters loco production. 781
CBTU expansion by takeover. 747*
CBTU Fortaleza metro. 567(map)
CBTU Rio suburban lines to have ATC. 492
CVRD loco order. 432
Fepesa Class EC362 loco delivery. 709
Fepasa World Bank reconstruction loan and plans. 204, 487, 748*(map)
Grains Railway plans. 71(map), 353, 429(map), 487, 633, 742*(map)
Mafersa privatisation. 569, 641
Ore Railway (Anapolis-Vilhena) plan. 429(map)
Porto Alegre hovering monorail. 781
Private owner cement tanks. 133
Production Railway (Paranagua-Guaira) construction. 429(map), 633, 742*
RFFSA Belo Horizonte passenger terminal reconstruction. 132
RFFSA coal wagon order. 205
RFFSA crane and track machinery purchases. 133
RFFSA development and plans. 741*
RFFSA funds for modernisation. 633
RFFSA Rio-São Paulo high speed line proposal. 427
RFFSA Steel Railway completion plan. 199, 429(map), 633
Rio de Janeiro LRT routes. 357, 491

BULGARIA
BDZ Sofia-Plovdiv route relay signalling and microprocessors. 679*
BZD Sofia-Varna new express service. 492
Navibulgar train ferry Varna-Ilychevsk. 568

BURKINA FASO
Bobo-Dioulasso wagon plant. 635
Loan for railway requested. 712
RAN organisation to be wound up. 265
Tambao rail, track components and sleepers tenders. 563
Tenders for track. 713

BURMA
BR Diesel loco order. 356, 432
BR loco delivery. 432,568
BR track tender. 568
BR track trolley tender. 568
BR wagons and parts order. 640

C

CAMEROON
Regifercam Badjob-Kribi line study tender. 201(map)
Regifercam Douala passenger terminal (new) opens. 568
Regifercam personnel carriers. 759

CANADA
BC Rail second-hand loco. 493
BC Rail Shalath Bluff tunnel. 492
BC Rail sleeper and fastening order. 780
BC Transit extension. 269
Bombardier Inc acquires Pullman name rights. 133
Bombardier Inc range of products. 16
Calgary Transit current inverter EMUs. 593*
Calgary Transit extension. 492
CN Rail deregulation attitude. 349
CN Rail rail supply. 210
CN Rail track geometry train. 568
CN/CP Windsor-Detroit tunnel enlargement. 12
CP Rail advanced train control systems installation. 663*
CP Rail deregulation attitude. 349
CP Rail Golden wagon repair shop opens. 780
CP Rail Winnipeg-Thunder Bay CTC installation. 204
CP Rail Vancouver commuter service. 780
Drugs tests for train crew legislation proposed. 353
Edmonton LRT current inverter EMUs. 593*
GO-Transit Burlington passenger terminal. 640
Hawker Siddeley Trenton plant subsidised. 781
H J Skelton appointed Godwin Warren's distributor. 713
PLM rolling stock for lease. 13
Quebec, North Shore & Labrador rail contract. 133
TTC Bloor-Yonge passenger terminal refurbishment. 132
TTC Class H6 EMU delivery. 781
TTC North York Centre passenger terminal opens. 433
TTC subway to GO-Transit station plan. 269
TTC trackwork order. 780
TTC tramcar displayed. 492
TTC Waterfront LRT starting. 491, 640
Via Rail coach order, superliner. 210, 438
Via Rail loco delivery. 77
Via Rail Montreal maintenance depot. 780
Via Rail Montreal-Toronto high speed line study. 707
Via Rail Vancouver servicing depot. 492

CHILE
FCdelS investment programme. 9
FCdelS Laja-Temuco electrification. 9, 76
Santiago metro Line 2 extension opens. 712
Taltal Railway Kitson-Meyer loco. 272

CHINA
Beijing Metro. 76, 491
Chinese Railways aid from Japan. 82
Chinese Railways Beijing-Datong digital telecommunications. 205
Chinese Railways Beijing no-smoking station. 568
Chinese Railways, Class 6K electric loco. 7, 238, 489, 569, 812, 813
Chinese Railways Class 8K electric loco. 718, 813
Chinese Railways Class SS3 electric loco. 813
Chinese Railways Class SS4 electric loco. 813
Chinese Railways coach order. 351
Chinese Railways coal traffic technology. 812*
Chinese Railways computer installation. 563
Chinese Railways Datong-Qinhuangdao line. 132, 493
Chinese Railways Dayaoshan deviation tunnel progress. 351
Chinese Railways diesel loco order. 77
Chinese Railways electric loco delivery. 427, 718
Chinese Railways freight wagon orders. 205, 351
Chinese Railways Hangzhou Qiantanjiang bridge replacement. 199
Chinese Railways Hangzhou second bridge. 640
Chinese Railways Jundu tunnel. 132
Chinese Railways management organisation revised. 135
Chinese Railways Nanning-Fancheng line opens. 432

Chinese Railways radio signalling order. 640
Chinese Railways refrigerated van deliveries. 713
Chinese Railways. Sansshui-Zhaoquing and Yunfu branch open. 487
Chinese Railways standard coach prototypes. 565
Chinese Railways telephone exchange order. 780
Chinese Railways Tianjin lines upgrading. 268
Chinese Railways Tongliao-Huolinhe line open. 127
Chinese Railways Urumqi-Lankol link progress. 709
Chinese Railways wagon order. 357
Chinese Railways World Bank loan for modernisation. 263
Chinese steam locomotive export drive. 716
East China Railway Construction Office set up. 129
Guangshen Railway elevated avoiding lines. 780
Guangshen Railway to Shenzhen double tracking. 780
Haicheng-Xiuyan local railway. 12
Langxian Forestry Railway. 201
Rizhao-Junan local railway. 492
Shenyang passenger terminal provision. 12
Yidu-Dajiawa local railway. 356

COLOMBIA
Bogata LRT. 433, 639(map)
FNC World Bank loan for modernisation. 76

CONGO
Congo-Ocean Railway. 356
Congo-Ocean coaches delivered. 429

CUBA
FdeC coach air-conditioning. 77
FdeC railway development and plans. 736*

CZECHOSLOVAKIA
ČSD battery shunter test. 492
ČSD Chrast u Plzne-Rokycany electrification. 76
ČSD coach order. 780
ČSD current inverter electric loco 432, 712
ČSD electrification plans. 489
ČSD Praha-Plzen electrification complete. 489
Praha metro Line A extension open. 569

D

DENMARK
DSB automatic passenger-operated ticket machines. 76
DSB design conference. 82
DSB Great Belt link tenders. 563, 635, 709
DSB Fredrikssund S-bane station rebuilding. 356
DSB København workshops closure. 640
DSB optical fibre signalling applications. 817*
DSB/SJ Öresund link report. 563(map), 709
DSB sleeping cars leased from Britain. 268,492
Train ferry Frederikshavn-Gothenburg. 263

E

ECUADOR
Enfe Quito-Puerto Nuevo line study. 487
Enfe spare loco parts sought. 268

EGYPT
Alexandria Tramways tyre tender. 569
Cairo metro. 18
ER Cairo regional metro. 639
ER stores management and control improvement contract. 205
ER Track component tender. 713

ETHIOPIA
Addis Ababa-Assab railway plan. 263
Addis Ababa-Assab Railway funds. 777
Djibouti-Ethiopian Railway upgrading and re-equipment. 568

F

FINLAND
VR coaches, new generation. 777
VR 125th anniversary celebration. 572
VR snowplough purchase. 493
Valmet and Rautaruukki co-ordination. 569
VR Helsinki-Moscow accompanied motor car traffic. 640

FRANCE
Alsthom acquires Jeumont Schneider rolling stock interests. 18, 73
Alsthom sale of controlling stake in Pielstick. 493
Aramis people mover trials. 203
Bordeaux automated metro study. 12
Brest tramway study. 712
CGE privatised. 433
Eurotunnel plans. 5, 210, 365, 383*, 570
Grenoble Tramways opening. 589*
Industrial heavy duty diesel-hydraulic shunter. 225*
Jeumont-Schneider rolling stock interests to Alsthom. 18, 73
Lyon metro Line D. 291*(map)
Nantes tramway extensions. 492
Orly airport, Paris, access lines. 203, 646
Private owner container wagons building. 268
RATP Line 7 extension opens. 269
RATP Louis Blanc-Pré St Gervais full automation plan. 127
RATP RER extension to Eurodisneyland. 355
RATP RER rail tour in TEE coaches. 136
RATP station dwell times measurement. 360
RATP VAL Orly Airport-Antony link plan. 132
Rouen tramway plans. 563, 711(map)
SAFT (CGE) takes over Alcad battery making. 205
SNCF business plan. 7
SNCF Channel Tunnel traffics payments. 349
SNCF diesel loco order, high power. 263
SNCF electronic fuel injection trials for local diesel engine. 224*
SNCF freight rolling stock order. 199
SNCF freight trains at high speed. 98*(map), 353
SNCF 'multi-fret' wagon order, 493
SNCF Paris-Nevers electrification. 640
SNCF Paris-Vaugirard temporary passenger terminal. 498
SNCF push-pull train set delivery. 493
SNCF regional passenger service development. 103*
SNCF Rennes-St Brieuc electrification opens. 432
SNCF second 160 km/h freight service. 775
SNCF/SNCB/BR TGV sets tendering. 433
SNCF strike losses. 135
SNCF TGV Atlantique stock. 427
SNCF. TGV Atlantique tracklaying start. 487, 492, 641
SNCF. TGV Civrieux-St Quentin Failavier-St Marcel-lez-Valence extension line plan. 71, 129(map)
SNCF TGV electric/gas turbine type studied. 432
SNCF TGV Lille-Grenoble service. 640
SNCF TGV Nord. 351(map), 386, 425, 570, 707, 783*
SNCF track-to-train data transmission extension. 268
SNCF *Train Express Régional* plans. 265
SNCF train ferry for Channel service launched. 353
SNCF up-market first class plans. 351
Strasbourg VAL line. 491(map)
Transmanche finance complete. 777
Transmanche-Link rolling stock stability tests. 713
Transmanche Sangatte branch for Eurotunnel building. 7
Transmanche tunnelling machine order. 637

G

GABON
CEG Owendo-Franceville passenger service. 563
Octra Moanda ore trains. 574
Octra Franceville extension official opening. 73

GERMAN DEMOCRATIC REPUBLIC
DR Delitzsch-Eilenburg electrification. 76
DR EMU for Berlin S-Bahn. 271
DR Falkenburg-Riesa electrification. 76
DR Lichtenberg-Berlin Ost electrification. 492
DR overhead line inspection car. 271
DR signal markers in rear. 357
DR track renewal backlog. 573
DR train services to West Germany improved. 707
Leipzig Spring Fair rail exhibits. 271*
Mukran-Klaipeda train ferry. 432
Private owner Class EL22 mining loco. 271

GERMAN FEDERAL REPUBLIC
Bayerische Zugspitzbahn Class Beh4/8 EMU. 496
Bayerische Zugspitzbahn extension. 268
Berlin M-Bahn. 432, 784
DB Class 120 electric loco. 71
DB Class 480 EMU. 641
DB Class 628.2 DMU. 109*, 127
DB electronic train monitoring spread. 268
DB Fals wagon order. 493
DB Financial difficulties. 646
DB freight traffic cuts. 646
DB Günzburg-Augsburg upgrading. 565
DB Hannover S-Bahn. 495
DB IC-Express train sets order. 127, 425, 635
DB ICE mail and parcel trains study. 274
DB intermodal terminal, Bischofsheim, 12
DB intermodal traffic plan. 561
DB Interregio train services. 356, 489
DB Karlsruhe-Offenburg *neubaustrecke*. 199, 775
DB Köln S-Bahnen. 495
DB Lehrte SSI signalling centre. 76
DB München-Nord marshalling yard. 425, 635
DB München S-Bahnen. 495
DB *Neubaustrecken* design features. 155*
DB *Neubaustrecken* Mannheim-Stuttgart trial running and opening. 268, 427
DB Nürnberg-Lauf electrification. 640
DB Nürnberg S-Bahnen. 495, 779
DB railway police disbanded. 568
DB Rhein-Main S-Bahn. 75, 495
DB Ruhr S-Bahn extensions. 11,75, 495
DB S-Bahnen building progress. 495
DB shunting locomotive radio control large-scale trial. 201
DB Singen-Scaffhausen line to be electrified. 775
DB Stuttgart airport S-Bahn. 495
DB track machine Type VG90. 469
DB train services to DDR improved. 707
DB Type Sahimms wagon order. 713
Duewag axleless bogie trials. 265
Frankfurt-Konigsteinerbahn DMU. 268
Frankfurt U-Bahn Line C opens. 12
German Railway Engineers' Association Frankfurt track machinery exhibition. 408*
Hannover tramways tram order. 493
Karlsruhe Stadtbahn through running on DB. 75
Köln-Bonn etc current inverter loco delivery. 205
MAN buys controlling stake in Pielstick. 493
Metro train vibration suppression. 40*
Nürnberg S-Bahn. 75
Nürnberg Line 2 extension opens. 12
Oberrheinische Eisenbahn tramcar order. 493
Private owner pressurised gas tank wagons. 568
Private owner tank wagons delivery. 433
Regensburg O-Bahn proposal. 274
VDEI Frankfurt track machinery exhibition. 160*
Vorgebirgsbahn LRT line. 76
VöV tramcar prototype research programme. 491

GHANA
GRC Accra-Tema and Takoradi lines restoration funds. 427
GRC coach deliveries. 13
GRC diesel shunter delivery. 133
GRC investment paying off. 138
GRC loan from Italy. 640

GREAT BRITAIN
Advanced Transport for Avon Ltd. 18, 709
Allied Plant takes over Tiger Holdings. 493
Almex Control Systems Ltd formed. 205
Asea Stromberg Ltd formed in GB. 357
Beclawat absorbed by CH Industrials. 133
Birmingham metro plans. 685*(map)
B&M Group takes over D. Wickham & Co. 641
Brown & Root Vickers Ltd formed. 133
BR aerodynamic laboratory for trains. 127
BR Anglia region set up. 707
BR annual report and wider issues. 485
BR Aptis ticket machine installation progress. 9
BR Argus test coach. 50*
BR Arlesey passenger terminal to re-open. 712
BR ballast profiling speeds track relaying. 321
BR Bournemouth-Weymouth electrification. 641
BR and Brel relationship. 69
BR Cambrian lines radio signalling. 780
BR Cardiff local services extended and improved. 129(map)
BR Channel Tunnel traffics payment. 349
BR Class 37 with Mirrless engine. 9
BR Class 58 loco. 205
BR Class 60 freight diesel loco. 127, 635
BR Class 87/2 loco (Class 90). 356, 569, 707
BR Class 91 loco. 228*, 569
Class 142 Voith transmission. 641
BR Class 150/2 DMU. 201
BR Class 155 DMU. 13, 269, 353, 471*
BR Class 156 DMU. 269, 471*, 641
BR Class 319 EMU. 106, 201, 432, 682*
BR Class 442 EMU. 107, 269, 429
BR Class 465. 682
BR Class 487 EMU Refurbishment cost sponsored. 199
BR compensation claim for parcels contract break. 12
BR corporate plan, five year. 571
BR data recorders for Derby research. 713
BR design conference. 82
BR disc brake orders. 569
BR DMU constant mesh transmission development. 133
BR DMU replacement programme, new types. 79*
BR Dorchester South passenger terminal redeveloped. 12
BR Driver Only approved for Southern Region. 268
BR dynamic track stabiliser. 757*
BR East Anglian electrification finished. 268
BR East Coast electrification. 493
BR Eastbrook passenger terminal opens. 12
BR Eurotunnel approach routes. 383*(map), 436
BR Fenchurch Street, London, passenger terminal modernised. 712
BR Freightliner information network computer order. 569
BR Freightliner terminal closures. 73
BR Frizinghall passenger terminal opens. 640
BR Haddenham & Thame passenger terminal. 716
BR Halewood passenger terminal proposed. 432
BR Heathrow airport branch proposed. 779
BR Heysham branch re-opens to passengers. 132
BR Huntingdon-Peterborough electrification opens. 268
BR InterCity train telephones. 12
BR InterCity 21st birthday. 359
BR intermodal piggyback lorry route proposed. 643(map), 716, 784
BR Inverness SSI signalling centre. 268, 429
BR Largs line electrification complete. 12
BR level crossings, Stott report. 633
BR local services and bus re-organisation. 138
BR locomotives for freight plans. 127
BR London Liverpool St re-signalling scheme. 432, 713
BR and LRT study tram links in Croydon. 267
BR maintenance depot crane order. 205
BR maintenance and stores for rolling stock organisation. 459*(map)
BR Manchester Piccadilly resignalling. 205
BR Margam marshalling yard. 640
BR Mark IV coach order. 73, 261, 356, 637, 713
BR Midline service established. 13
BR Network South East rolling stock strategy. 106*
BR Network South East train catering expansion. 356
BR NSE, Monopolies Commission report. 715
BR oil spillage clean-up method. 496
BR passenger routes re-opened to traffic. 263
BR passenger terminals (new) open. 568
BR power equipment for electrification. 13
BR Pullman passenger services. 76
BR Railfreight crude oil carriage contract. 356
BR research laboratory on coatings and corrosion. 568
BR Royston-Shepreth electrification. 199
BR Sanderstead-East Grinstead electrification. 640
BR senior citizen railcard sales drive. 492
BR Sheffield-Rotherham Holmes' chord complete. 268
BR SIG bogies for. 261, 362
BR signalling centre equipment order. 77
BR/SNCF/SNCB TGV sets tendering. 435
BR Snow Hill link, London, new passenger terminal proposal. 7
BR Snow Hill (Birmingham) link signalling and opening. 13,707
BR Strathclyde area upgrading. 711
BR super sprinter order. 780
BR telecommunications optical fibre link, London-Edinburgh. 132

BR telephones for public on trains. 204
BR T4 coach bogie tested and not ordered. 50, 362
BR track dipped welds straightening techniques. 167*
BR track recording DMU. 781
BR traffic sub-contracts by air and road. 125
BR train crewing revision. 73
BR Trimley-Felixstowe Dock branch completed. 12
BR wagon order for china clay. 77, 493, 641
BR Waterloo & City track maintenance machine. 835
BR Watford-St Albans electrification. 492
BR Watford stations link line plan. 131
BR Wester Hailes and Lake passenger terminals opening. 204
BR Windsor link (Manchester) signalling. 13
BR Yoker SSI signalling centre. 13, 205
BR York SSI signalling centre. 357, 713
Brel and BR relationship. 69, 459*
Brel Crewe workshop re-equipment. 13, 461*
Brel sells Doncaster wagon works. 707
Brel Swindon works sold. 76
CAIB (UK) takes over grain hopper wagons. 713
Channel tunnel high speed approach. 781
Cummins Engine Co reorganisation. 13
Docklands Light Railway. 11, 210, 312*, 431, 574, 639
Docklands Light Railway EMU order. 780
Docklands Light Railway extension. 11, 431, 487, 569
Elastic Rail Spike Co golden jubilee. 644
Electric railway systems for new century conference. 705
Euro-Trac sets up vehicle hire. 433
Eurotunnel plans and programme. 5, 127, 204, 208, 210, 272, 365, 383*(map), 570, 637, 705, 715, 777
FKI Electricals merged with Stone International. 569
Glasgow underground upgrading plans. 711
Heathrow airport rail links study. 489(map)
Hunslet Engine merged with Telfos. 569
Inst Mech E Diesel Locomotives of the Future conference. 272*
Inst Mech E European High Speed Rail Network for the 1990s, The, seminar. 644
Leeds light rail proposals. 496
Light Rail conference discusses financing. 773
LRT and BR tram links in Croydon study. 131, 267
LRT Computer Services Division sold. 204
LUL Angel passenger terminal rebuilding. 781
LUL automatic train announcer. 492
LUL Baker Street signalling centre for Jubilee line. 427
LUL confectionary vending machine development. 269
LUL Central line modernisation plan. 131
LUL Central line study for curve elimination at Bank. 712
LUL crime fight measures. 11
LUL East London line planned extension. 131
LUL Hillingdon passenger terminal. 641
LUL Lots Road generating station replacement. 569
LUL 1983 stock order detail. 205
LUL 1986 stock prototypes and delivery. 267, 781
LUL Piccadilly line driver-only operation. 492
LUL signalling computerised. 675*
LUL SSI. 675*
LUL Stanmore branch resignalling. 12
LUL ticket machine installation. 357
LUL ticket machine maintenance contract. 493
LUL Tower Hill passenger terminal refurbishment. 132
LUL. Tubeless video platform monitoring. 473
LUL ultrasonic track testing train. 433
LUL Watford stations link line plan. 131
Manchester Light Rail Project demonstration show and finance. 207(map), 635
Midland metro plans (Birmingham). 685*(map)
NIR Belfast York Road-Central link. 431
NIR Class 451 last DEMU delivered. 492
NIR Portis ticket machine equipment. 269
Port of Dover train ferry accommodation. 76
Powell Duffryn track maintenance division set up. 13
Private owner diesel shunter order. 356
Private owner piggyback wagon order. 432
Private owner loco main line tender. 493
Private owner mineral water wagons. 13
Private owner Trailer Trains. 102
Private owner Whatley quarry automatic wagon loading. 780
Railway Industry Association of Great Britain. 640
Railway supply industry re-alignment suggested. 197
RFS Industries plc takes over Doncaster wagon works. 707
Sheffield Tramways. 208
Standard Railway Wagon low-floor container wagon. 77
TBL new factory. 781
Telfos takes over Hunslet Engine Co. 569
Temperature Ltd's Sandown factory enlarged. 433
Thomas Cook international seat booking link. 563
Tiphook Rail wagon leasing plans. 77, 539*
West Midlands metro plans. 685*(map)
Wickham, D, & Co taken over by B & M Group. 641

GREECE
Athens metro. 204, 355, 433
Athens metro lines 3 and 4 contracts. 355
CH diesel multiple unit sets orders. 265, 493
CH diesel shunter delivery. 357
Thessaloniki metro proposal. 641

GUATEMALA
Guatemala City LRT proposals. 204

H

HONDURAS
FNH local passenger services revival. 132

HONG KONG
Hong Kong Tramways trackwork order. 780
KCR EMU order. 269
KCR Lo Wu passenger terminal rebuilt. 132
KCR plans East Kowloon LRT line. 775
Mass Transit Eastern Cross Harbour tunnel. 493
Mass Transit extension plans to second airport. 355(map)
Mass Transit GTO chopper EMU order. 639
Mass Transit GTO chopper EMU prototypes. 77
Mass Transit Kwun Tong-Tai Koo tunnel financial package and orders. 203, 205
Mass Transit third harbour tunnel proposed. 571
Tuen Mun LRT building. 75, 133, 713
Tuen Mun LRT extensions. 131, 492
Tuen Mun LRT links with KCR. 267
Tuen Mun LRT management training. 432
Tuen Mun LRT rolling stock delivery. 711

HUNGARY
BKV EMU, articulated. 204
BKV EMU order. 641
BKV north-south metro extension. 492
GySEV Győr-Sopron electrification. 432
GySEV Győr-Csorna electrification. 76
MÁV bond issues for private holding. 16
MÁV Budapest Keleti station resignalling. 356
MÁV Budapest-Siofok electrification opening. 780
MÁV computerised yard stock system. 780
MÁV electrification plans. 565
MÁV Budapest Ferencváros reconstruction. 568
MÁV plans EMU type. 77
MÁV Székesfehérvár marshalling yard. 77
MÁV Szolnok container terminal. 640
MÁV and Vegyepszer joint wagon building. 493
MÁV wagon deliveries. 780
Nagyborzsony-Nagyirtas tourist line. 640

I

INDIA
Calcutta metro EMU order. 269
Calcutta metro fare collection. 781
Delhi LRT. 431(map)
Delhi maglev peoplemover proposal. 12
IR autotransformer 25 kV electrification. 132
IR battery-electric narrow gauge loco trial. 357
IR Bombay Kurla and Bandra termini for suburban traffic. 11
IR Bombay-Lucknow limited stop express starts. 204
IR bonds raise capital. 71
IR Calcutta Howrah terminal expansion. 76
IR capacity crisis. 574
IR capacity improvement plan for north-east. 775
IR coaching stock programme. 269
IR Daitari-Binsapani line finance. 76
IR Delhi-Agra-Kanpur line for TGV proposal. 362
IR Durg-Ghusaul line telecommunications order. 780
IR dynamic track stabiliser tender. 269
IR electric loco tenders. 641
IR electric loco testing plant Chittegrranjan. 707
IR electrification approvals. Arakonam-Renigunta and Jolarpet-Mettur Dam. 268
IR electrification masts installed by helicopter. 432
IR electrification progress. 362
IR EMU order. 269
IR flash-butt rail welding machine delivery. 569
IR Hassan electrical component works. 76
IR high speed train study for Delhi-Agra-Kanpur route. 204
IR Huybi-Karwar branch planned. 12
IR loco technology transfer deal sought. 775
IR Jolarpettai-Erode and Salem-Mettudam electrifications. 712
IR Kapurthala coach factory. 568, 569
IR loco purchase loan from World Bank. 427
IR Mankhurd-Belapur line construction funds. 491
IR 1 000th loco from Chittaranjan. 77
IR optical fibre communications order. 269
IR overhead line test car tender. 133
IR passenger terminals modernised. 432
IR prototype loco, coach and wagon bogie order goes abroad. 274
IR rail tender. 13
IR Royapuram-Madras Beach electrification. 427
IR Satna-Rewa branch. 127
IR seat and berth computer reservation, Calcutta. 492
IR sleeper contract. 133
IR SSI Srirangam interlocking. 565
IR track machinery tenders. 713
IR track renewal and World Bank loan issues. 485
IR Trichur-Guravayar extension approved. 268
IR twelve-car EMU for Bombay. 11
IR wheelset order. 641
IR wheelset tender. 269
IR workshop tool tenders. 77
IR Varanasi-Bhatni gauge widening planned. 780

INDONESIA
PJKA container train, Jakarta-Bandung. 7
PJKA DMU maintenance funds. 712
PJKA Jakarta commuter train collision. 780
PJKA Jakarta-Manggarai line resignalling tender. 781

IRAN
Arak rolling stock plant first coach deliveries. 127
RAI Bafq-Bandar Abbas electrification and signalling. 432, 713, 781
RAI and PR Zahedan-Taftan link. 76, 432
RAI track maintenance machinery tender. 357
Teheran metro plan. 431

IRAQ
IRR abolished in favour of State Enterprise. 563
IRR Baghdad-El Quaim line managed by Rites. 498
State Enterprise for the Implementation of Transport and Communications projects (SEITAC). 427

IRISH REPUBLIC
Iarnrod Eireann (IE) formed. 71

ISRAEL
IR loco order. 77
IR Nahil Zin-Eilat extension study. 492
IR new superior authority. 707
IR Tel Aviv-Jerusalem track upgrading. 563

ITALY
Acotral EMU delivered for Nord Roma. 12
Ansaldo Trasporti buys into Transcontrol (USA). 13
Breda Costruzioni takes over Ferrosud and Omeca. 641
Ferrosud taken over by Breda Group. 641
FS Campiglia Marit.-Fiorentina di Piombino double-tracking. 712
FS centralised stores distribution scheme. 432
FS Class E491 loco. 113*
FS Class E492 loco. 113*
FS Class E656 driver-only operation. 76
FS Class ETR450 tilting coach train. 55*, 136, 356, 487
FS coaches for high speed, delivery. 487
FS Firenze automated passenger announcements. 13, 433
FS high speed railway plans. 822*(map)
FS high speed test track. 356
FS management restructuring. 73
FS Milano-Bologna maximum speed raised. 268
FS Paola-Battipaglia line resignalling. 13
FS Paola-Cosenza Sanmarco tunnel route opened. 640
FS restaurant car order. 780
FS retractable road wheel wagons tested. 268, 605*
FS Roma-Napoli direttissima approved. 813
FS Roma San Lorenzo ETR 450 maintenance depot. 76
FS 'Sleeperette' train services. 780
Milano metro extensions opened. 76
Omeca taken over by Breda Group. 641.
Torino-Malano-Venezia direttissima building proposal. 362
12 kV dc proposal for electrification. 705

IVORY COAST
RAN organisation to be wound-up. 265

J

JAPAN
Aizu Railway. 132, 268, 568
Fukuoka metro extension to Kaizuka. 76
Futama Railway. 268
Gannichi Railway. 132
Hanku Railway. 495
Hanshin Railway. 495
Hokushin Lyuko Railway EMU. 491
Ibara Railway. 127
Ise Railway. 268
Isumi Railway. 640
Japan Rail (JR) is born. 197, 199
Japan Railway Construction Corp. 199, 233
Japan Railway Technical Service future. 239
JNR Class 207 EMU. 77
JNR Kyushu shinkansen construction. 71
JNR links from Honshu island to Hokkaido and Shikoku. 79*, 801*(maps)
JNR privatisation. 7, 199
JNR Sapporo main line rebuilding. 132
JNR shinkansen projects to go ahead. 127
JNR skiers' EMU. 80
JNR Yokohama Kokuden line double-tracking. 204
JR Class 100 and 300 EMU, shinkansen. 233*, 452*, 489
JR Class 165 EMU. 356
JR Class 183 DMU. 239
JR Class ED79 electric loco. 238*
JR freight rolling stock disposals. 646
JR investment plan finance. 565
JR Joetsu shinkansen speed to 240 km/h. 707
JR land sales proceeds for construction. 786
JR Osaka cross-city line planned. 775
JR passenger service improvement suggestons. 438
JR piggyback wagon trials. 569
JR Seikan tunnel opening. 487, 801*(map)
JR Shikoku Henshi-Bishan bridge completion. 635, 712, 801*(map)
JR Shinkansen developments and plans. 199, 233*(map)
JR Shinkansen traffic figures. 640
JR Tokaido shinkansen intermediate station plan. 712
JR Tokyo commuter off-peak publicity schemes. 780
Keihan Railway. 495
Keio Railway track quadrupling plans. 718
Kinki Nippon Railway. 495
Kobe Metro extension. 11(map), 357
Kobe Rokko Island peoplemover. 11(map)
Linear motored metro test track, Osaka. 131
Maglev car record speed. 239
Moka Railway. 712
Nagara-gawa Railway start-up. 76
Nakamura Railway. 132, 268
Nankai Railway. 495
Noto Railway. 204
Odakyu Railway EMU. 238
Odakyu Railway track quadrupling plans. 718
Oigawa Railway Abt rack loco tender. 569
Osaka Kansai airport rail links. 495*(map)
Osaka LIM test track. 297*
Osaka metro extension. 357
Osaka Rapid Railway monorail plans. 269
Sapporo metro (Toho) EMU. 239
Seibu Railway track quadrupling plans. 718
Sendai Municipal metro EMU control. 456*
Sendai Municipal metro opening. 569
Shigaraki Railway. 268
Tama Urban Monorail Co. 718
Teito Rapid Transit EMU. 238
Teito Rapid Transit Line 12, small profile. 295*(map)

Teito Rapid Transit smoking ban. 781
Tenryu-Hamana-ko Railway DMU delivery. 133
Tobu Railway track quadrupling plans. 718
Tokadai New Transport people mover. 357
Tokyu Railway track quadrupling plans. 718
Tosa Kuroshi Railway extensions. 356
Wasaka-Koge Railway. 712
Yagan Railway. 80
Yokohama metro. 204
Yokohama Minatomirai 21 line. 567

JORDAN
Aqaba Railway hopper wagon order. 133
Aqaba Railway road/rail crane order. 569
Aqaba Railway track maintenance tool tender. 205
Hedjaz-Jordan Amman-Zarqua passenger service. 492

K

KAMPUCHEA
Railway restoration and difficulties. 210

KENYA
KRC Class 94 loco delivery. 781
KRC management development World Bank loan. 356
KRC Mombasa-Nairobi double-tracking plan. 712
KRC Uganda traffic difficulties. 438
KRC upgrading funds. 565, 712

KOREA (NORTH)
Haksong-Hohung-ri electrification complete. 268
North Korean Railways Class Pulgungi-6 electric loco. 429
Pyongyang-Moscow through coaches. 432
Pyongyang metro. 433
Railway seven-year plan. 712
Sukchon-Onchon cut-off line building. 268
Wagon export drive. 713

KOREA (SOUTH)
Busan metro. 433
KNR Chonan-Nonsan cut-off line. 777(map)
KNR diesel breakdown crane tender. 77
KNR Kumchong-Wongok electrification. 712
KNR Kyunghoo line signalling centre. 77
KNR push-pull train set. 709
KNR route Seoul to Mt Sorak planned. 263
KNR Seoul-Pusan route capacity problem. 18
KNR Seoul-Yongdungpo track quadrupling. 7
Pusan metro. 779
Seoul-Kangnung high speed line feasibility study. 635
Seoul metro extensions planned. 75, 431, 779(map)

M

MALAYSIA
Kuala Lumpur LRT system. 77, 131(map), 355
PKTM carriage bogie tender. 133
PKTM Class 24.1 loco delivery. 492, 610*
PKTM private operation plans. 9, 199, 351
PKTM railflaw detector vehicle purchase. 781
PKTM track relaying intentions. 493
Wagon-Lits proposed operations on rail. 132

MALI
RCFM loco delivery. 487

MAURITANIA
Mauritania Railway traversed by sail power. 80

MEXICO
Guadalajara tramways proposed. 779
Monterrey tramways proposed. 779
NdeM coach re-conditioning. 493
NdeM rail order. 205

MOROCCO
Casablanca metro plan. 77
ONCF assistance from Italy. 132

MOZAMBIQUE
CFM funds from Finland. 780
CFM loco rehabilitation contract. 133
CFM Nacala-Entre lagos section guarded by troops. 498
CGM Nacala to Malawi line re-opens. 718
CFM political impediments to rail operations. 349
CFM rail contract. 133
CFM Zimbabwe's corridors to sea rehabilitation. 718, 781

N

NETHERLANDS
NS Flevo line opening. 274
NS loco renewal programme, electric and diesel. 210*
NS Pro Rail timetable scheme. 274
NS stations, new openings. 356
NS Weesp-Almere section opening. 127
NS and TGV Nord. 783*
NS Zwolle-Emmen electrification opens. 274

NEW ZEALAND
NZR asbestos-lined coach disposal problems. 136
NZR Auckland suburban rehabilitation. 274
NZR commercial struggle for survival. 359
NZR container wagon order. 13
NZR Horopito-Ohakune deviation opens. 429
NZR operational finances report. 5, 561
NZR railbus order. 77, 274
NZR reorganisation into business groups. 261
NZR 25 kV electrification. 199, 533*(map), 784

NIGERIA
NRC coal export opportunity. 786
NRC and Daewoo wagon works joint venture. 9
NRC diesel spares tender. 641
NRC Itakpe-Ajaokuta branch, standard gauge. 427, 489
NRC workshop equipment delivery. 269
NRC technical assistance contract. 712

NORWAY
NSB Oslo Central passenger terminal, new buildings. 12
NSB Tveter-Kjenn double-tracking. 12

P

PAKISTAN
Lahore metro proposal. 641
PR coaches, second class air-conditioned. 356
PR diesel loco delivery. 76
PR diesel loco order. 77
PR freight air brakes trials. 71
PR Khanewal-Samasatta electrification plan. 432
PR Kosha-Peshawar line suggested. 487
PR microwave communication links workshop. 204
PR and RAI Taftan-Zahedan link. 76, 432
PR re-signalling contracts. 133
PR road-rail inspection car delivery. 357
PR speed rises to maximum. 640

PARAGUAY
FL Encarnación-Posadas bridge tracklaying. 775

PERU
Lima metro. 267

PHILIPPINES
Phividec extension planned. 568

POLAND
PKP EMU, double-deck prototype. 781
PKP Jelenia Gora-Luban-Wegliniec electrification complete. 132
PKP rolling stock orders. 777
PKP Runowo-Bialogard electrification. 492
PKP Skarzysko-Kamienna electrification opens. 712

PORTUGAL
CP container terminal, Leira. 568
CP Corail coaches delivery. 432
CP investment package. 635
CP Lisbon-Oporto line upgrading. 7
CP route over April 25 bridge at Lisbon. 775

R

ROUMANIA
Bucharest metro. 357
CFR. Babeni-Berbesti Alunu line completion. 76
CFR Bréd-Déva line opened. 492
CFR Dornesti-Siret branch opens. 204
CFR double-deck coach order. 13
CFR Satu Mare-Bixad route complete. 640
CFR Simeria-Petrosani electrification. 204
CFR Vilcele-Rimnicu Vilcea cut-off line. 76
Constanza LRT. 433
Constanza-Samsun train ferry. 356

S

SAUDI ARABIA
Saudi Rail Riyadh workshop maintenance. 77
Saudi Rail wheelset tender. 713

SENEGAL
CFS loco delivery. 132, 433
CFS wagon deliveries. 132, 569

SINGAPORE
Changi airport people mover. 433
Mass Rapid Transit computer software contract. 204
Mass Rapid Transit EMU. 308*, 436, 793*
Mass Rapid Transit depots for rolling stock. 469
Mass Rapid Transit Jurong-Boon Lay extension. 641
Mass Rapid Transit Ltd formed. 646, 791
Mass Rapid Transit Railway. 82, 203, 261, 433, 466*(map), 567, 711, 791*
Mass Rapid Transit Railway opens. 711, 781
Mass Rapid Transit privatisation. 567, 646
Mass Rapid Transit track practice. 466*(map)
Mass Rapid Transit switchgear order. 13
Mass Rapid Transit tunnelling progress. 204

SOUTH AFRICA
SAR Class 10E1 loco delivery. 640
SAR Class 14E loco current inverter prototype order. 637, 755*
SAR Johannesburg signalling centre order. 269
SAR parcels and container terminals. 568
SAR strike response. 349
SATS re-organisation. 138

SPAIN
Barcelona metro Line 1 westward extension. 492
Barcelona metro rolling stock plans and delivery. 12, 127
Bilbao metro. 641, 711(map)
FC Generalitat Valenciana EMU. 131
Port Bou-Barcelona standard gauge line study. 201
Renfe Brazatortas-Alcolea cut-off line. 427
Renfe Class E444.5 intercity EMU. 427
Renfe Class 446 EMU order. 563
Renfe coach air-conditioning. 77
Renfe Madrid container terminal. 492
Renfe motive power and rolling stock for high speed. 705
Renfe motive power and rolling stock orders planned. 351
Renfe Rail Transport Plan. 15(map), 243(map)*
Renfe tickets for tourists. 12
Renfe track maintenance contract. 77

SRI LANKA
Container company for rail and other hauls set up. 127
SLGR civil war, recovery after. 646
SLGR concrete sleeper plant. 7
SLGR container wagon order. 781
SLGR Kelamiya-Sapuraskanda passenger service. 712
SLGR rail and track component tender. 205
SLGR rehabilitation loan. 712
SLGR third track on Colombo approaches. 263
SLGR wagons delivered. 269

SUDAN
SR management organisation. 786
SR rehabilitation funds from Italy. 640

SWEDEN
Asea mergers with Brown Boveri. 569
Asea's private office coach. 16
SJ Class WL4 sleeping cars. 356
SJ Class X2 tilting coach train. 53*, 447*
SJ container order. 269
SJ/DSB Öresund link report. 563(map)
SJ reorganisation plans. 261
SJ turnout, concrete-sleepered. 781
Storsstockholms Lokaltrafik passenger information equipment order. 493
Train ferry Göteborg-Frederikshavn. 263

SWITZERLAND
Aigle-Sepey-Diablerets Railway loco delivery. 433
Autelca (Hasler) takes over Xamax. 205
Basel regional metro proposal. 433
Baselland Transport. 12, 204, 641
Bern-Solothurn Regional Transport EMU. 713
Berne tramways EMU orders. 75, 433
BLS car carrier ferry boom. 498
BLS coach delivery, Mk IV. 493
BLS coach rebuilds to saloons. 132
BLS Lötschberg tunnel motor car ferry operation. 76
Bodensee-Toggenburg current inverter GTO loco. 129,432, 603
Brown Boveri merges with Asea. 569
Centovalli Railway Locarno route re-location. 132
FOB Class HGe4/4 II loco order. 493
FOB Furka tunnel motor car ferry operation. 76
Forch Railway Be8/8 EMU order. 569
Genève metro plans. 711
Genève Tramways extension. 433, 492
Genève low floor tram. 431
Lausanne South-West Tramway (TSOL). 300 641
Neuchatel Tramways tram order. 13
Private railway government funding. 427
Private railway investment package. 712
Private railway subsidy for modernisation. 7
RhB Chur alterations for Arosa branch approach. 351
RhB EMU order. 357
RhB Vereina tunnel. 71, 263
SBB Aarau intermodal terminal. 432
SBB Bahn 2000 national referendum. 487
SBB Bahn 2000 plan equipment and management 826*
SB Class HGe4/4II rack loco order. 13
SBB Class RBDe4/4 EMU order. 13
SBB container order. 269
SBB double-track between Zug and Cham. 263
SBB Genève Cointrin airport branch opens. 263, 429
SBB Gotthard tunnel freight rail loads increased. 432
SBB Gotthard tunnel road ferry reinstatement. 718
SBB infrastructure costs paid by government, transport strategy. 197
SBB lease of DB Class 140 loco. 12
SBB loco classes altered for greater speed. 76
SBB loco design for Bahn 2000. 826
SBB Mark IV coach for Bahn 2000. 826
SBB Meilen signalling centre. 492
SBB parcels by air to Great Britain. 125
SBB purchase of DB Class 220 loco. 76, 827*
SBB signalling, new speed system. 669*
SBB steel coil sliding hood wagon order. 357
SBB Type Eano wagon order. 263
SBB wagon order. 13
SBB Zurich S-Bahn alterations. 640
SBB Zurich S-Bahn Limmat tunnel. 267
SBB Zurich train monitoring order. 269
Schindler Waggon absorbs Flug- und Fahrzeugwerke. 133
Schindler Waggon Altenrhein AG name adopted. 433
Sihltal-Uetliberg current inverter GTO loco. 129, 603
Speno Rail Services' RMS-2 grinding train. 165*
Trans-Alpine kangaroo lorry routes proposals. 643

SYRIA
CFS shunting tractor order. 781

T

TAIWAN
Kaohsiung metro plan. 131
Taipei metro. 210, 267, 491, 797*(map)
TRA catenaray system supply tender. 000
TRA DMU tender. 205
TRA EMU from Italy. 54* 77
TRA EMU tender. 133
TRA level crossing, automatic equipment tender. 781
TRA signalling equipment tenders. 205
TRA telecommunications signalling equipment tender. 493
TRA Tightlock coupler tender. 357

TANZANIA
Tazara Railway. 129, 709
Tazara wagon deliveries. 568
TRC breakdown crane order. 269
TRC Class 87 loco refurbishment. 781
TRC Isaka road-rail terminal tender. 775
TRC track machine funding. 12

THAILAND
RSR Bangkok approach reconstruction tenders. 268
RSR Bangkok Hualampong accident. 12
RSR breakdown crane tender. 569
RSR coach order. 781
RSR private operation of express trains tender. 82, 637
RSR privatisation efforts. 438
RSR rail fastening purchase. 357

RSR rolling stock tenders. 569
RSR sleeping car delivery. 12
RSR World Bank loan. 637

TUNISIA.
SNCFT Sfax re-signalling tender. 433
SNCFT ticket issuing machines order. 433
Tunis Light Rail road-rail maintenance vehicle tender. 205

TURKEY
Ankara metro. 203(map)
Ankara tramway tender for system. 77, 567
Bosphorus tunnel feasibility study. 12
Istanbul metro. 569
Konya tramway proposed. 569, 713
Samsun-Constanza train ferry. 356
TCDD Class DE 11 loco order. 568
TCDD Class E43 electric loco. 9, 111*
TCDD crane purchase. 357
TCDD crane, snowplough and track machinery tenders. 133
TCDD diesel engine spares tender. 493
TCDD Divrigi-Iskenderun electrification. 133
TCDD electric train heating order. 269
TCDD Hydarpasa-Ankara line modernisation. 641
TCDD Kayas-Cetinkaya line re-signalling tender. 713
TCDD rail purchase. 713
TCDD rail tenders. 13, 205
TCDD signalling tenders. 77, 133, 641
TCDD telephone exchange tender. 357

U

UGANDA
URC export traffic difficulties. 438
URC Kampala-Kasese modernisation plan. 76
URC tank wagon orders. 429, 641
URC wagons delivered. 205

UNITED STATES
ABC Rail Corp formed (late Abex). 713
Advanced train control systems, safety rules examined. 5
Alaska Railroad rolling stock order. 433
American Public Transit Association meeting 1987, 705
Amtrak Atlantic City passenger terminal. 12, 640
Amtrak Bosnywash corridor lines, proposed sale. 9
Amtrak electric loco orders. 13, 433
Amtrak New Rochelle passenger terminal renewal. 268
Amtrak New York-Boston turbotrain service improved. 717
Amtrak New York-Washington acceleration. 780
Amtrak New York-Montreal service suspended by poor track. 432
Amtrak ordered to fit automatic train control. 362
Amtrak Philadelphia-Lindenwold section rebuilt. 265
Amtrak study to eliminate subsidy. 199, 360
AT&SF container movement contract. 712
AT&SF RoadRailer trains. 101
Baltimore metro phase B opening. 357
Bart EMU delivery. 357, 641
Bart extension Fremont-San José. 269, 569
Bart Pittsburg-Antioch corridor extension proposal. 713
BN advanced railroad electronics signalling installations. 664
BN concrete sleeper contract. 493
BN container double stack Seattle-Croxton service. 127
BN container wagons, double stack, acquired. 205
BN and CSX transcontinental container service. 568
BN power-by-the-hour experiment for traction. 125
BN swing nose frog trials. 13
BN track relaying machine contract. 269
Bombardier Inc buys Transit America. 713
Buffalo LRT. 77
Carnegie Mellon University high speed train research. 132
Cogifer Inc expands by acquisition. 641
Conrail container double-stack service Croxton-Seattle. 127
Conrail sale. 76, 199, 263
Conrail and Santa Fe transcontinental intermodal service. 565
Consumer Rail equity Act progress. 349
CSX and BN transcontinental container service. 568
CSX intermodal wagon delivery. 433
CSX signalling centre for entire rail system. 351
CTA Midway airport line. 77, 493
CXT Systems Spokane concrete sleeper factory. 493
D&RGW bids to buy SP. 707
Denver Wallyrail. 431
Detroit peoplemover opens. 563
D&RGW and SFSP abortive merger. 132
Drug abuse and railroads. 138
Enertec Corp purchases and renames Ohio Brass. 781
Fairmont Railway Motors and Tamper Corp merge. 133
General Electric advanced coal-gas turbine. 76
Hennepin Regional RR tramway. 567
High speed line studies diminish. 574
Houston tram network plans. 355
Kershaw's ballast cleaning track machinery. 163*
Long Island RR double-deck coach enquiry and tender. 438
Long island RR investment funds. 129
Los Angeles metro. 77, 433, 781
Los Angeles metro EMU order. 493
Los Angeles metro tunnel tenders result. 77
Maglev Pittsburgh-Harrisburg -Philadelphia proposed. 356
MARC Baltimore LRT studies. 781
MARC (Maryland) loco order. 357
Marta (Atlanta) metro. 132
MBTA (Boston) coach order. 205, 567
MBTA (Boston) EMU delivered. 239
MBTA (Boston) Lechmere maintenance depot. 13
MBTA (Boston) Orange line relocation complete. 355
MBTA (Boston) orbital line study. 132
MBTA (Boston) south-west track relocation. 563
MBTA (Boston) staff training for ATO and maintenance. 205
Metro North Commuter Railroad Brewster depot opened. 433
Metro North Commuter Class FL-9 loco current inverter rebuilds. 605
Metro-North Commuter Railroad EMU purchase. 11
Metro North Commuter RR investment funds. 129
Miami metro. 781
Missouri-Kansas-Pacific purchase by UP. 76
New Jersey Transit electric loco tender. 781
New Jersey Transit improvement and connections. 268, 491
Norfolk Southern intermodal wagon order. 101, 433
Nuclear missiles rail-mounted. 436
NYCTA automated revenue collection. 13
NYCTA. East River and Archer Avenue UMTA funds. 487
NYCTA EMU order. 203
NYCTA EMU overhaul contract. 133
NYCTA investment funds. 129
NYCTA materials sales division. 781
NYCTA Queens extension. 204
NYCTA reconstruction funds. 71
NYCTA Totterville station re-signalling. 641
PATCO improvement and repair programme. 269
PATH Exchange Place passenger terminal refurbishment. 132
PATH improvement programme. 269
PATH platform extension. 569
PATH sub-station equipment order. 357
Pittsburgh & Lake Erie RR. 640
Pittsburgh South Hills LRT scheme completion. 357, 569
Private owner hopper wagon order. 133
Private owner Railmaster wagons. 775
Private owner (Trailer Train) intermodal wagon order. 433
Rail steel metallurgical cleanliness investigation. 175*
Railmaster trains, private owner. 102
Railmaster System Inc taken over by Duchossois Inc. 569
Riesdel Omini Products opens Lancaster, Penn, plant. 713
RoadRailer trains development. 101*, 709
Sacramento LRT. 12, 267, 641
San Diego LRT Bayside extension. 563
San Diego LRT El Cajon extension. 12, 204, 563, 713
San Diego LRT EMU order. 563
Santa Clara metro. 132, 432, 711, 781
Santa Fe and Conrail transcontinental intermodal service. 565
Seattle suburban service plan. 493
Septa EMU order. 779
Septa EMU second-hand. 132
Septa Frankford line construction. 433
SFSP proposed merger outcome. 485, 646
Soo Line Lake States division sale. 568, 780
Southeast Kansas Railroad starts up. 432
SP El Paso intermodal terminal. 204
SP loco order. 357
SP Long Beach intermodal terminal. 76
SP sale progress. 646, 707
SP San Francisco-San José branch sold off. 432
Tidewater Regional Transit. 641
Transit America ceases passenger coach production. 18, 713
Tulsa-Oklahoma City LRT proposal. 433
UP advanced train control systems installation. 663*
UP to buy Missouri-Kansas-Pacific. 76
UP RoadRailer wagon order. 709
Valley Railroad Corp. 716
Walt Disney World, FL, monorail EMU. 133
Washington metro EMU. 13
Washington metro expansion. 13
Washington metro Potomac Greens station funding. 204
Wisconsin Central start-up. 568, 780

USSR
Alma Ata metro. 133
Gorky metro. 493, 641
Kharkov Institute coal-burning loco. 640
Kharkov metro. 132
Klaipedia-Mukran train ferry. 432
Krasnoyarsk metro proposal. 357
Krivoy Rog LRT. 357
Leningrad metro current inverter EMU. 77
Moscow metro Chekovskaya-Savelevskaya extension. 641
Moscow-South high speed route plan. 498
SZD Arys-Chengel'dy electrification complete. 132
SZD BAM line completion advances. 432
SZD Berkakit-Yakutsk line. 640
SZD Blagodarnyy-Budennovsk line opened. 492
SZD centralised wagon control in Moldavia. 132
SZD Class CS7 loco order. 433
SZD Class R200 high speed EMU order. 637
SZD Class TEM-2U conversion for LPG fuel. 498
SZD Class WPX passenger coach. 201, 271
SZD double-deck coaches planned. 12, 713
SZD efficient working methods drive. 362
SZD Kamenskaya station accident. 78
SZD Kanash-Yudino electrification. 76
SZD Moscow area signalling centre contract. 265
SZD Moscow-Helsinki accompanied motor car traffic. 640
SZD Mubarek-Dushanbe line upgrading. 640
SZD North Caucasus line electrification complete. 635
SZD Ordzhonikidze-Ksani (Beslan-Tbilisi) route construction. 43*(map), 635
SZD passenger announcement equipment order. 433
SZD refrigerated van order. 713
SZD ultrasonic rail test car. 268
SZD wagon tank order for synthanol. 77
SZD wagons built in India. 493
SZD Yamal peninsula line tracklaying. 492
Tashkent metro. 269
Yerevan metro extension. 77

V

VENEZUELA
Caracas metro track testing machine tender. 269
Ferrocar wagon order. 641
FNdeV Purto Cabello-Caracas line 'national priority'. 487

VIETNAM
DSVN coaches delivered. 780
DSVN diesel shunting loco delivery. 205
DSVN Haiphong-Chua Ve branch. 356
DSVN Hanoi-Ha Dong line opened. 76
DVSN oil-firing for steam locomotives. 712
DVSN Quan Trieu-Nui Hong branch building. 712
DVSN review, progress and plans. 806*
DVSN second-hand coach acquisition. 205
DVSN trunk line modernisation. 132

Y

YUGOSLAVIA
JZ Bihac-Knin electrification opens, 353(map)
JZ diesel loco order. 205
JZ punctuality disruption fines. 360
JZ Skopje-Gevgelija electrification opens. 204
JZ ticket issuing machine order. 133
JZ World Bank loan. 635
JZ Zagreb-Split-Sibenik to be electrified. 204
JZ Zagreb-Rijeka route upgrading. 640

ZAIRE
Gecamines rail equipment orders. 269
SNCZ container wagon order. 641
SNCZ Kinshasa-Matadi signalling equipment order. 433
SNCZ loco tender. 13
SNCZ tenders for equipment and spares. 199
SNCZ upgrading finance. 76
SNCZ wagon delivery. 493

ZAMBIA
Tazara Railway. 129, 709
Zambia Copper Mines railway equipment tenders. 73
ZR funds for re-equipment. 73
ZR microwave telecommunications scheme. 432
ZR wagon orders. 269, 635, 641

ZIMBABWE
Committee of Inquiry into Parastatals' report. 633
NRZ corridors to the sea. 69, 718
NRZ development plans. 718
NRZ electrification extension plans. 71
NRZ Harare-Mutare optical fibre telecommunications. 133
NRZ Harare suburban electrification. 779
NRZ loco spares tender. 13

LETTERS

After Gemini. 136, 208
Air pressure. 496
Aizu-Asakusa addendum. 80
Big boxes are better. 80, 208, 272
Body swap. 572
Busway no paradox. 436
Diesel or electrick? 641
Driverless trains. 272
ETR tilt control. 136
Eurotunnel battles. 208
Greek mythology. 136, 208
Hatchet panel. 360
Intermodal corridor. 716, 784
Manser, Joe. 208
More on boxes. 272
NPV and track costs. 136
NRZ appointments. 644
On 40 ft boxes. 80, 208
Opportunities lost. 716
Realigned supplier. 16
Singapore technology. 436
Spanish timings reviewed. 784
Sprinter brakes. 496
Ten years at 200 km/h. 16
TGV timings explained. 716
Tunnel landmark. 496
Tunnel topics. 436
Top of the Bops. 360
Trams still running. 360
Whose signals? 784

MAPS

Argentina. Subte system, Buenos Aires. 752
Australia. Principal freight routes. 515
Australia. QR Caboolture-Gladstone electrification. 524
Australia. SRANSW East Hills-Glenfield and Maldon-Dumbarton electrifications. 529
Australia. Westrail Perth electrification. 521
Brazil. CBTU Fortaleza metro plan. 567
Brazil. Fepesa. 748
Brazil. Grains Railway planned route. 71
Brazil. New freight railways. 429
Brazil. Railway system. 742
Cameroon. Regifercam railways and proposed extensions. 201
Colombia. Bogota metro plan. 639
Europe. Öresund DSB/SJ link. 563
Europe. Paris—Amsterdam-Cologne-London high speed line plan. 775
France. Lyon metro with Line D. 291
France. SNCF high speed freight train routes. 99
France. SNCF TGV extension to Marseille planned. 129
France. SNCF TGV Nord route. 351
France. Strasbourg VAL line. 491
Great Britain. BR Cardiff local service extensions. 129
Great Britain. BR Eurotunnel approach routes. 384
Great Britain. BR intermodal kangaroo lorry route proposal. 643
Great Britain. BR maintenance depots, Level 5. 460
Great Britain. Docklands Light Railway with extensions. 312

Great Britain. Heathrow airport rail links proposed. 489
Great Britain. Manchester Light Rail proposed routes. 207
Great Britain. Midland metro plans. 685
France. Rouen tramway proposals. 711
Hong Kong. Mass Transit extension plan to second airport. 355
India. Delhi LRT. 431
International. Eurotunnel. 373
International. Eurotunnel Cheriton and Fréthun terminals. 380
Italy. FS high speed railways, existing and planned. 823
Japan. Kobe metro and peoplemovers. 11
Japan. JR Honshu-Shikoku bridge route. 801
Japan. Osaka Kansai airport rail links. 495
Japan. JR Seikan tunnel route. 801
Japan. Shinkansen network and expansion. 234
Japan. Teito Rapid Transit Line 12. 295
Korea (south). KNR Chonan-Nonsan cut-off line. 777
Korea (South). Seoul metro extensions. 779
Malaysia. Kuala Lumpur LRT plans. 131
New Zealand. NZR 25 kV electrification. 534
Singapore Mass Rapid Transit Railway. 467
Spain. Bilbao metro. 711
Spain. Renfe new and high speed routes. 243
Spain. Renfe new routes planned. 15
Switzerland. Lausanne South-West Tramway (TSOL). 300
Taiwan. Kaohsiung metro plan. 131
Taiwan. Taipei metro. 797
Turkey. Ankara metro. 203
USA. Hennepin County Regional Railroad. 567
USSR. SZD Beslán-Tbilisi construction. 43
Yugoslavia. JZ Bihac-Knin electrification. 353

PRODUCT NEWS

Austria. Gauge profile checker. 247
Austria. Track profile measurement. 613
France. Autoloc radio-controlled shunter. 613
Canada. Gearbox and bearing cleaning simplified. 115
France. Computer-controlled lockers for luggage. 409
France. Contact wire, tramway, lightweight suspension. 613
France. Tickets by credit card. 409
France. Transporter bogie. 183
German Fed Rep. Graphite-free batteries. 759
Great Britain. Automatic traction gearbox, microprocessor controlled. 613
Great Britain. Bright blackboard. 57
Great Britain. Decorative table edge strip. 759
Great Britain. Emulsifying degreaser. 183
Great Britain. Fishplate hole drilling, precision. 323
Great Britain. Flame-resistant padding foam. 409
Great Britain. Herbicides for right-of-way. 541
Great Britain. Hopper wagon unloader. 541
Great Britain. Inflatable coach gangway seals. 689
Great Britain. Low inductance resistors. 183
Great Britain. Lubrication oil filter. 247
Great Britain. Mirror for level crossings. 115
Great Britain. Personnel carriers, track. 759
Great Britain. Plastic glazing. 473
Great Britain. Mobile conveyor for wagon unloading. 57
Great Britain. Steel coil protection of wagon. 115
Great Britain. Stress distribution simulator. 57
Great Britain. Ticket machines, portable electronic. 835
Great Britain. Ticket machines, vandal-proof. 323
Great Britain. Track maintenance machine for restricted loading gauge. 835
Great Britain. Tubeless video platform monitoring. 473
Great Britain. Vandal-resistant catenary insulators. 541
Great Britain. Variable announcement equipment. 835
Irish Republic. Shunting tractor, medium capacity. 473
Irish Republic. Swap body tank container. 835
Italy. Rail fastening placer and fitter. 57
Italy. Road/rail trolleys and shunting loco. 323
Italy. Wheel slide preventer. 57
Japan. Microelectronic track relays. 473
Japan. Microprocessor-controlled level crossings. 689
Sweden. Brake adjusters, flexible. 323
Sweden. Container, 5 tonne handling. 247
Sweden. Lightweight, hand-held, tampers. 409
Switzerland. Faster data transmission. 183
Switzerland. Flat wheel detector. 835
Switzerland. Ticket machine memory. 541
USA. Buffing shocks damper system. 115
USA. Crane-equipped road-rail tractor. 759
USA. Ditch and cess clearance machine. 473
USA. Elastomer pad against securing chain shocks. 247
USA. Electronic destination boards. 115
USA. Fuel gauge family. 759
USA. Heavy duty torque multiplier. 689
USA. Loco lavatories. 613
USA. Portable carriage cleaning plant. 613
USA. Radio signal repeater unit. 247
USA. Rail grinder, small. 541
USA. Rail lubricator machine. 541
USA. Sleeper replacement simplified. 183
USA. Spring loaded catenary insulators. 835
USA. Track relaying light road/rail crane. 323
USA. Trailer-Rail intermodal system. 689

PUBLICATIONS

AAR R-628 Review of Pressure Car Wheel Puncture Vulnerability, A. 837
AAR R-641 Analysis of Wheel Fracture Factors. 837
AAR R-643 Evaluation of New Steels for Tank Cars. 837
Advanced Concepts for Computer-Aided Dispatching. 410
Bentheimer Eisenbahn, Die. By L Kenning and K Wilmsmeyer. 613
Berlin Transit. 58
British Railways 1948-73. By T R Gourvish. 116
Channel Tunnel Story, The. By Dr M R Bonavia. 613
Chemins de Fer de la Provence. 690
Channels and Tunnels. By Sir Nicolas Henderson. 125
China Railway Map. 116
Computers in Railway Management, Computers in Railway Installations, Track and Signalling and Computers in Railway Operations. 760
Diesel Locomotives of the Future. 474
Docklands Light Railway Official handbook. By S Jolly and R Bayman. 116
DSB at the Dawn of the '90s. 690
Electric Railways of Japan, Volume 2. By L W Demery, R Forty, R Degroote and J W Higgins. 690
Elettroitreni ad Asseto Variabili, Gli. By G K Koenig. 116
Elsner's Taschenbuch der Eisenbahn Technik '87. 542
European Transport (Inst CE). 690
Funf Jahrhunderte Bahntechnik. Edited by Dr Eh H Weigelt. 116
Great Rail Non-Journeys of Australia. By Dr C Taylor. 324
GRS Spacerail. 58
Guatemala Railways and Industry: Development and Decline. By P English. 474
Handbuch der Grossunternehmen. 248
Histoire de la Traction Electrique, Tôme 2. By Y Machefert-Tassin, F Nouvion and J Woiment. 58
ICE — High-Tec on Rails. Edited by D Lübke *et al*. 184
InterCity: 21 Years of Progress. By R Ford and B Perren. 410
Jahrbuch des Eisenbahnwesens '87. 542
Jahrbuch Schienenverkehr 6: 1986-7. By H Roggenkamp. 410
Jane's Urban Transport systems 1987. 613
Jane's World Railways 1987-88. 837
Maglev and Linear Drives. 324
Multilingual Glossary of Cargo Handling Terms. 760
Nahverkehrs-Taschenbuch '87. 184
Nationalisation of British Transport, The. By Dr M R Bonavia. 474
Network Analysis Techniques. By S K Bhatnagar. 324
On the Right Lines? By S Potter. 116
Public Transport: its planning, management and operation. By P White. 58
Rail, Le. By J Alias. 760
Railway Across the Equator. by Amin A and Matheson A. 248
Second Track Sector Course 1986. 116
State of Tomorrow Technology in Transit Signalling and Control. 324
See Ireland by Train. By F Mulligan. 184
Technical Aspects of Low-Cost Solutions for Lines Carrying Low Traffic Volumes. By ORE. 248
SEMALY Rapport et perspectives d'Activities. 837
Thomas Cook European Timetable. 837
Traccion en los Ferrocarriles Españoles, La. By J A Melendo. 184
Transportation Noise Reference Book. Edited by P Nelson. 760
Tunnel, The: The Channel and Beyond. 542

PEOPLE

A

Abbas, G. 437
Abraham, C. 785
Adams, J. 209
Afome-Nzu, D. 573
Ahlström, K. 81
Ahmad, A. 437
Ahmad, B. 81, 437
Ahmad, J B. 785
Ahmad, M. 81
Ahmad, N. 81, 209
Ahmad, R. 209(biog)
Ahmad, Z. 645
Akhtar, A. 437
Akhtar, N. 645
Alam, S M M. 645
Allen, D J. 17
Alvi, A A. 81
Ambler, T I. 273
Andersen, F. 645
Anderson, R C. 17
Arecha, J M G. 361
Arif, A R. 273
Ashiq, M. 437
Aslam, M. 273
Attwell, C. 17
Auberger, B. 209
Aurangzeb. 437
Austin, C. 645
Autruffe, H. 645
Aziz, A. 209
Aziz, F. 437

B

Baartmans, L. 209
Bakht, N. 645
Balfour, S C. 273
Barben, H. 497
Barber, J. 17
Barca, A. 573
Batley, J G. 497
Baylis, D. 717
Beattie, R. 137
Beatty, R R. 81
Belleval, D de. 497
Benya, M M. 209
Berg, N-O. 361
Berney, L G. 273
Beuret, Dr G. 273
Bhaila, H D. 137
Bicknell, R. 785
Binder, J A. 361
Biss, A. 437
Bok, Dr T C. 645
Bolter, R. 497
Bornkessel, D. 645
Bos, C J W. 573
Böttcher, E. 785
Bourdon, Y G.17
Brändli, H. 785
Brechbühl, A. 209
Bright, Sir Keith. 81
Brindle, A. 573
Broderick, A V. 81
Bromley, J D. 137
Buchanan, I. 81
Burnham, J. 717
Burnley, J H. 785
Burton, D. 497, 645
Bull, C. 497
Busby, J. 573

C

Caldwell, W R. 497
Capanna, Dr F. 437
Cardelli, M A. 137
Carlsson, S. 81
Caruso, T C. 137
Cavagnaro, M. 785(biog)
†Cave, Sir Richard. 17
Cazenave-Larroche, J-J. 497
Cetinkaya, E. 209
Cham, Dr T. 645
Channon, P. 497
Chappell, P. 17
Chaudbury, M A. 81
Chen, G. 273
Cheung, Sir O. 361
Chi, B. 273
Chidowe, R. 497
Chisanga, P J. 361
Chiwara, R. 497(biog)
Chomba, R. 361
Chong, Dr G J. 273
Choudhury, A H. 81
Christe, M. 437
Chughtai, A K. 645
Church, N. 497
Clark, W H. 137
Clarke, P. 717
Clarke, R. 497
Clements, C. 573
Coleman, D C. 137, 273
Conlon, P. 81
Cook, C. 437, 497
Coombes, A B. 273, 573
Corbett, G. 717
Cornell, J. 437
Cosentine, Dr A. 437
Cosgrave, S. 437
Coté, J. 573
Crane, L S. 81
Crawford, R G. 17, 717
Crippa, M. 497(biog)

D

D'Addio, M. 437
Dahn, W. 645
Daigle, J C. 645
Dakhkan, A. 137
Daly, J. 81
Damen, T. 81
Dancu, T. 717
Daouda, Y. 209
Darby, J O R. 17
Darr, M I. 209
Datta, S K. 717
Davies, J. 785
Davies, L. 361(biog)
Deer, D M. 17
Degan, A E. 573
DelliBovi, A. 785
DeMellow, J J. 273
Desai, R. 137
Desponds, R. 497
Dherse, J-L. 717
Dick, H-K. 273
Dickson, C. 497
Didier, D D. 573
†Diemant, H. 437
Dodge, E V. 137
Dole, E. 645, 785
Douffiagues, J. 573
Dollinger, Dr W. 273
Doyle, G D. 81
Drewery, E. 17
Driver, B. 573
Dumelow, L. 437
Dunkley, A. 81
Dunn, E D. 137, 273
Dupuy, J. 437
Durand, C. 81
Durand-Rival, P. 17(biog), 717
Duret, E. 497, 573(biog)

E

Earp, J. 17
Eberle, J. 437
Edley, I. 497
Edmonds, J. 717
Eisenring, H. 497
Ellis, J. 437, 497
Emch, M. 209
Escobar, E. 497
Esteban, F de. 17
Evans, J. 573, 717
Evans, M. 273
Eyton, T. 573

F

Fällun, K. 497
Farrell, J T. 573
Feroziuddin. 209
Ferreira, M M. 645(biog)
Ferris, C. 273
Figueredo, N de. 645
Finlay, W. 717
Firnhaber, G T. 645
Fléchon, C. 81
Foley, B. 497
Forrester, I. 81
Franklin, B G. 273
Frost, W. 573
Furth, A C. 717

G

Gaff, R. 361
Gallagher, J. 137
Gallery, B. 81
Gallo, N V. 361
Gasser, A. 645
Geist, R A. 17
Génière, R de la. 209
Geok, L L. 645
George, D. 273
Georgiev, V. 497
Gilani, Y R. 361
Gilbertson, M. 273
Gill, D H. 573
Gill, K. 645(biog), 785(biog)
Gillman, W L. 573
Gimpel, N R. 137
Goodwin, W. 17
Gorejena, D. 497
Gorrie,C. 209
Gould, H. 785
Gradon, J. 573

Grant, H R. 17
Grewel, H. 361
Grimshaw, D. 137(biog)
Grütter, W. 785
Guebuza, Lt-Gen A. 81
Gunn, D. 361
Gupta, S C. 717

H

Haapala, P. 361
Haaskjold, F. 209
Haavisto, P. 361, 573
Hagberg, R E. 361
Hainitz, H. 209
Hall, M. 273
Hammerberg, B. 361
Hand, W A. 81
Hansford, T. 785
Haq, I. 209
Hart, M. 497
Hartmann, Dr K. 273
Hartnett, E G. 209
Hashimoto, M. 209
Hashimoto, R. 209
Hasselman, D C. 573
Hawkins, J F. 497, 644
Heinisch, R. 645(biog)
Henare, R. 137
Henry, H. 273
Hessler, H. 17
Higgins, I. 361(biog)
Hill, D. 17, 497, 644
Hill, L A. 137
Hoellen, J J. 137
Hogglund, P K. 273
Howker, A. 137
Huang, T L. 273
Hume, A. 497
Hyde, K. 137, 273(biog)
Hussain, H I. 645

I

Ibuka, M. 209
Ilmari, M. 81
Ingram, J. 209
Iqbal, M. 81, 209
Ishii, Y. 209
Ishizuki, S. 209
Isikoglu, M. 209
Jago, C. 645

J

Jain, R K. 437, 497, 573(biog)
Jenkins, H. 717
Jeremic, Z. 209
Johnson, P. 17(biog), 273
Joss, P. 497
Julien, M. 209
Junnila, J. 573(biog)

K

Kakakhel, M S. 209
Kamal, A. 81, 437
Kamola, J W. 437
Kantor, K. 437
Kazim, A. 645(biog)
Keely, P. 361
Kelly, J H. 81
Kelly, R. 361(biog)
Keong, Dr C S. 645
Kerbel, C J. 273
Kerr, R. 17
Kha, M. 785
Khan, N M. 137, 361
Khan, S N. 273
Khattak, M A K. 361
Kilpatrick, W F. 573
Kilroy, R I. 17
King, Dr M A. 273
Kingston, I. 573
Kirby, D. 273, 717(biog)
Kirzner, J. 81
Kohn, R. 361
Kopperi, J. 81(biog), 361
Knecht, H. 437
Kowalczyk, F S. 573
Krebs, R D. 572
Kubat, H. 437
Kuhla, E. 717

L

Lacumber, P J. 497(biog)
Lai, Dr P. 273
Lane, R A. 717
Lash, N. 573
Latscha, Dr W. 497
Lattunen, P. 361
Laurie, J. 497
Lawless, R E. 81(biog)
Leach, A. 361(biog)
LeClair, M. 17, 81
Leeds, P F. 361
Lefcort, R. 645
Leffler, Dr N. 17
Lestrade, M. 573
Leung, M. 361
Lies, G. 437
Lightheart, D F. 573
Lindahl, G. 81
Lindenmeyer, C. 437
Lines, A. 497
Lion, R. 209
Lipsteuer, S J. 573
Littlewood, N. 573
Looney, D. 273
Low, P. 645
Lowe, T J. 437
Lyman, W C. 497
Lyons, J S. 273

M

McCalley, M. 17
McCarthy, Lord. 81
†McCusker, N. 645
McDougal, D J. 573
McGavin, K D. 273
Machida, N. 209
McInnes, D G. 497, 573
Mack, J T. 361(biog)
Mackie, G R. 497
McLaughlin, E G. 437
McLennan, K A. 137
McLoughlin, J. 81
McMahon, Sir Kit. 209
MacMillan, J. 573
MacNamara, R. 273
McQueen, E. 137
MacWhinnie, G M. 361
Mahr, N. 137
Mair, D. 573
Majid, H A. 273
Malik, Z H. 437
Malins, R. 645
Mann, S. 137
Mannino, C. 573
Marshall, E W. 17
Massa, J. 497
Masse, Y H. 573(biog)
Masters, R T. 645(biog)
Mathur, M D. 17
Mathur, R. 137
Maurer, P. 645
Memnon, M A. 81
Memon, S. 645
Mesick, R. 81
Messing, A M. 497
Mhungu, A. 497
Mian, A M. 209, 645
Michel, E. 497
Middleton, R J. 273
Minko, S. 209
Mitchell, D. 497
Mitchell, S H. 497
Miyake, S. 209
Mohamad, H Z O H. 137
Monkhouse, T. 81
Mooney, J B. 273
Mohsin, M N, 645
Morgan, B. 573
Morin, W H. 717
Morton, A. 209(biog)
Munhoz da Rocha, P. 645, 717(biog)
Murai, T. 209
Murray, Sir Donald. 437
Mutambirwa, Dr C. 497
Myers, S. 137(biog)

N

Nagakura, S. 209
Naqui, M. 81
Narain, K. 273
Narain, P. 437, 497
Nash, D. 437
Nash, P V. 573
Nastic, Z. 137
Nelson, J. 717(biog)
Nelson, R G. 497
Nemapare, K P. 497
Netter, L. 137
Newey, S. 717
Ngoundji, M-T. 573
Niblett, R. 437
Nicol. J. 785
Nicolson, Sir David. 17, 273
Nielson, E. 137
Nieminen, E. 361
Nkana, R G. 437(biog)
Norman, P. 273
Numminen, K. 81

O

O'Brien, P R. 361, 497
O'Connor, E J. 81(biog)
O'Mahoney, C. 497
Olivera, E. 717
Omori, Y. 209
Önal, E. 361(biog)
Orris, D C. 137
Oversier, P. 81

P

Paaswell, R E. 17
Paelinck, H. 717
Palette, J. 17
Pällmann, W. 273
Pampel, Dr F. 81
Paterson, M. 437
Pedersen, S E. 437(biog), 643
Pennock, Lord. 209
Peters, D. 17
Phillipson, N W. 645
Pieters, L. 209
Pinna, Dr G. 437
Po-Kwan, Y. 361
Poo, D. 273
Porter, J. 273
Powell, L C. 137
Powell, M. 497
Prakash, T. 209
Prasada, M N. 497
Purdy, H G. 137

Q

Qamar, Z. 645
Qureshi, A M. 273
Qureshi, Z. 645(biog)

R

Rahman, S. 645
Rao, B V R. 209
Rasheed, A. 273
Rautio, A. 361
Rayner, D. 717(biog)
Reed, J S. 361, 573
Ray, D E. 645
Reynders, D. 137(biog)
Rechsteiner, S. 645
Rhodes, J. 785
Ridley, Dr A. 717
Riemer, Dr H-L. 361
Rietmann, M. 437
Ritchie, G. 497
Ritchie, R J. 137
Rizvi, I H. 785
Rizvi, S R A. 645
Rizzotti, S. 437
Roberts, G J A. 273
Roberts, H. 785
†Robson, A E. 273
Rochet, P-L. 645
Roddie, W. 209
Römer, H. 361, 785
Romersa, A J. 17
Röthlisberger, C. 573
Rouvillois, P. 573(biog)

S

Saarinen, E. 785(biog)
Sæetersdal, S. 497
Saleem, A. 437
Sallee, R A. 785
Santos, L. 81
†Saunders, S T. 209
Savage, A. 273, 361
Savic, B. 209
Sax, Dr R. 497
Sayyed, K. 209
Schmidt, J J. 361
Scholes, Sir Robert. 717
Scholey, D. 209
Schouppe, E. 717
Schrewe, F. 361
Schwarzer, R. 645, 785(biog)
Scott, B. 717
Scott, S. 645
Scurfield, R J. 361
†Segalat, A. 81
Séquin, R. 437
Shaikh, A W. 645
Shankar, G. 137
Shaughnessy, P A. 209
Shaw, S. 137
Sheikh, A W. 273
Sheikh, I A. 209
Sheppard, C. 361
Shore, L. 81
Shreedharan, E. 17
Shuttleworth, R. 437
Shuwa, Maj-Gen M. 497
Simojoki, M. 81
Simoneasu, M-C. 645
Singh, R P. 437, 497
Singh, V. 17
Sinha, H S. 137
Skelton, D H. 209
Small, Dr F. 273
Smith, F. 573
Smith, R. 785
Smith, T G. 437
So, J Y C. 361
Somerville, W H. 497
Sovey, G H. 645
Speidell, P. 17
Sprainis, R J. 17
Sreedharan, E. 497
Stanley, R. 437, 785
Stark, S. 209
Stead, W G. 785(biog)
Stephen, Dr D. 573
Stinson, W W. 573
Stirk, J. 17
Stödter, Prof R. 361
Stolpe, T. 81
Strachan, J M. 17(biog), 644
Stumpf, R A. 17
Sturgess, J H D. 573(biog)
Suda, H. 209
Sugiura, T. 209
Sullivan, T. 209
Sumita, S. 209
Sundén, E. 361
Sunley, K. 497
Sutfin, S. 81
Sutherland, B. 273
Svanholm, B-D. 81
Svendsen, E. 437
Swanson, G A. 137, 273
Szemök, B. 573

T

†Talbot, R. 573
Tandon, R C. 273
Tarar, L D. 209, 437
Tarr, R. 717
Tarrer, L D. 645
Tattari, E. 361
Tawenga, S. 497
Taylor, A R. 573
Teoli, R A. 137,273
Terango, J V. 645
Tereschuck, P. 137
Terhune, W B. 81
Terry, W. 137
Thompson, P. 137(biog)
Tiberi, G. 437
Ticknor, A W. 645
Timperley, Dr S. 645
Tobin, T. 81
Tojo, T. 209
Toolan, T. 17
Torpin, Q W. 573
Trewin, P. 497, 645
Tripton, W P. 645
Tromp, Dr M. 785
Tsunoda, T. 209
Tung, C H. 361

U

Übleis, H. 437(biog)

V

Vaikkinen, V. 361
Van, B L. 645
Vetter, H O. 361
Vilanova, J M. 437

W

Wachob, J. 209
Wachter, H-R. 273
Wafa, S M J. 273(biog)
Wah, F S. 645
Walsh, J. 273
Walters, R. 361(biog)
Wanchoo, A N. 717
Wang, L W. 273
Wark, J E. 209
Warner, A G. 273
†Warner, G. 645
Warnke, Dr J. 273
Warris, S A. 645
Waters, D. 273
Waters, W G. 497
Watson, K. 17
Watson, T. 785
Watters, J A. 273
Weigelt, H. 137
Weiss, T. 17
Welsby J. 717
Westlie, F W. 497
Weyrich, P M. 437
Whitehouse, W H. 81
Winiger, M. 785
Withers, R. 717
Wood, P J. 573
Woodward, G C. 717

Y

Yaljan, V. 497
Yamashita, I. 209
Young, W. 497

Z

Zaidi, J. 645
†Zehnder, S. 645
Zeitlin, G. 785
Ziaullah, M. 437
Zöpel, Dr C. 645
Zurković, N. 137, 209(biog)

Printed by Diemar & Reynolds Ltd, Bedford